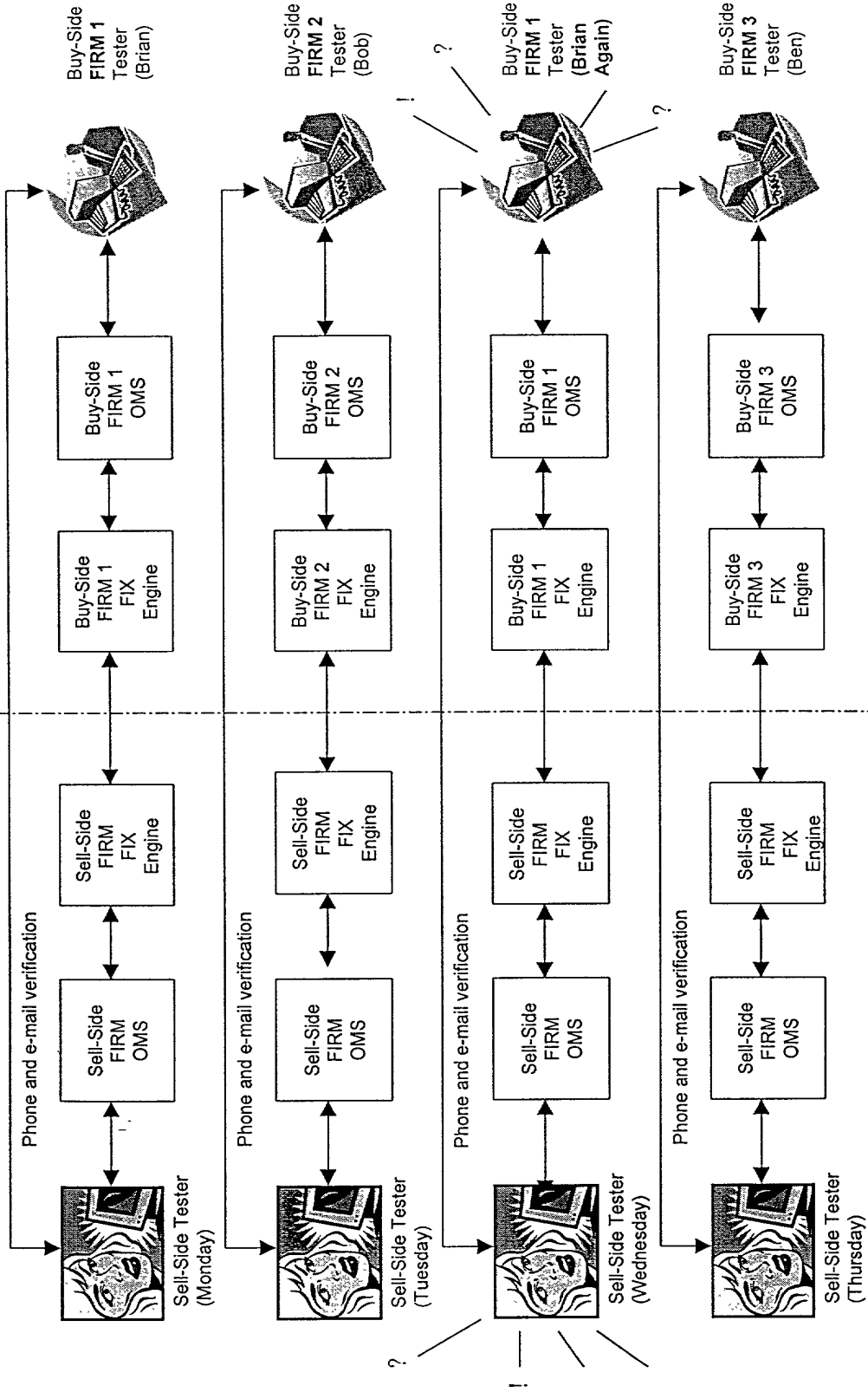


Manual Certification (Prior Art)



Buy-Side FIRMS 1 → X

Sell-Side FIRM

FIG. 1

095536.09701
T02760"925560

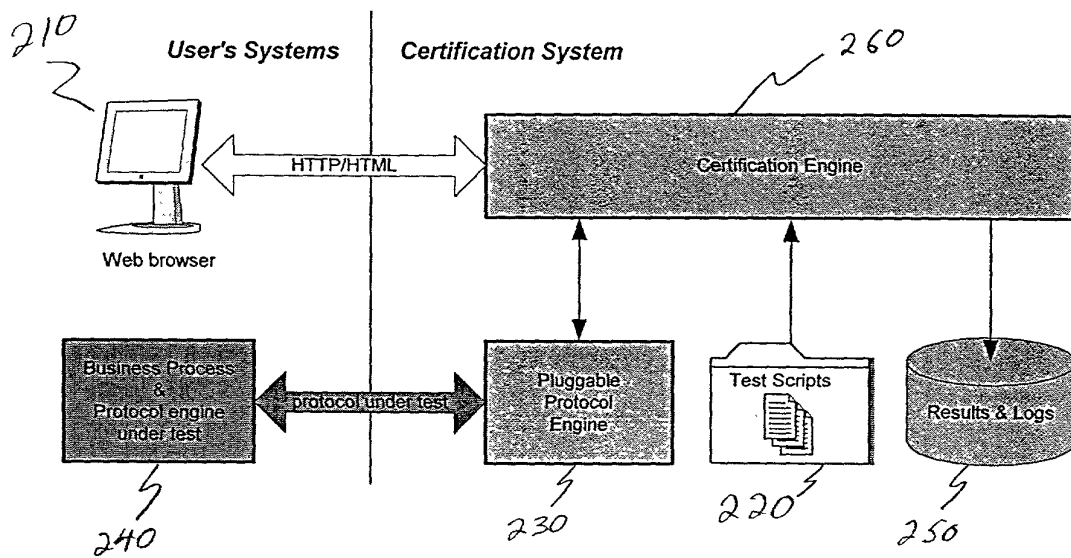


FIG. 2

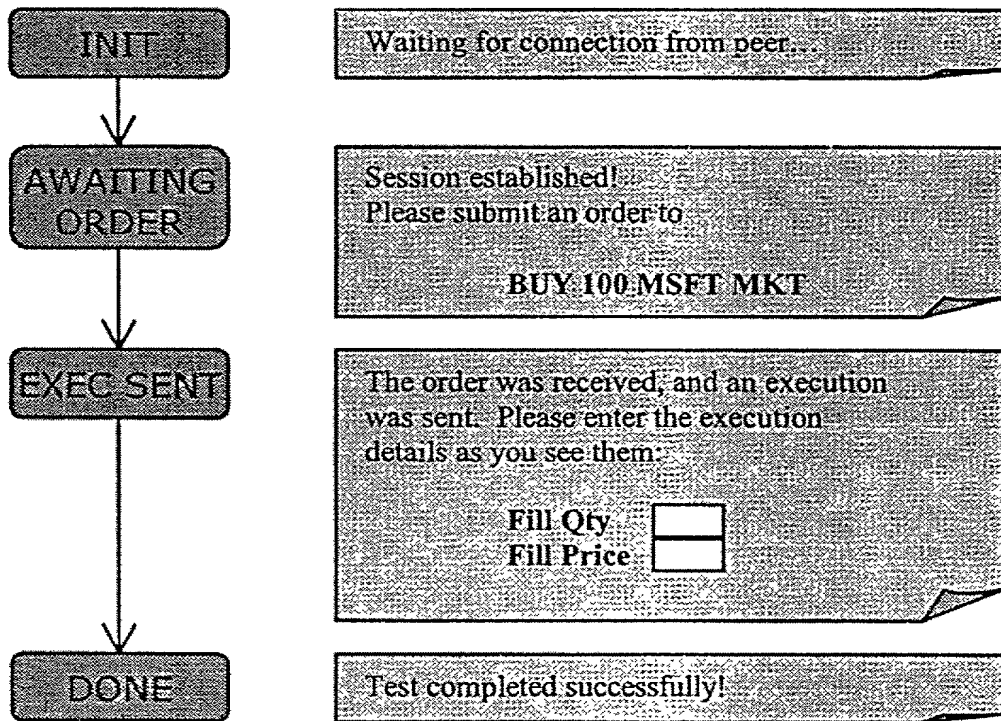


FIG. 2A

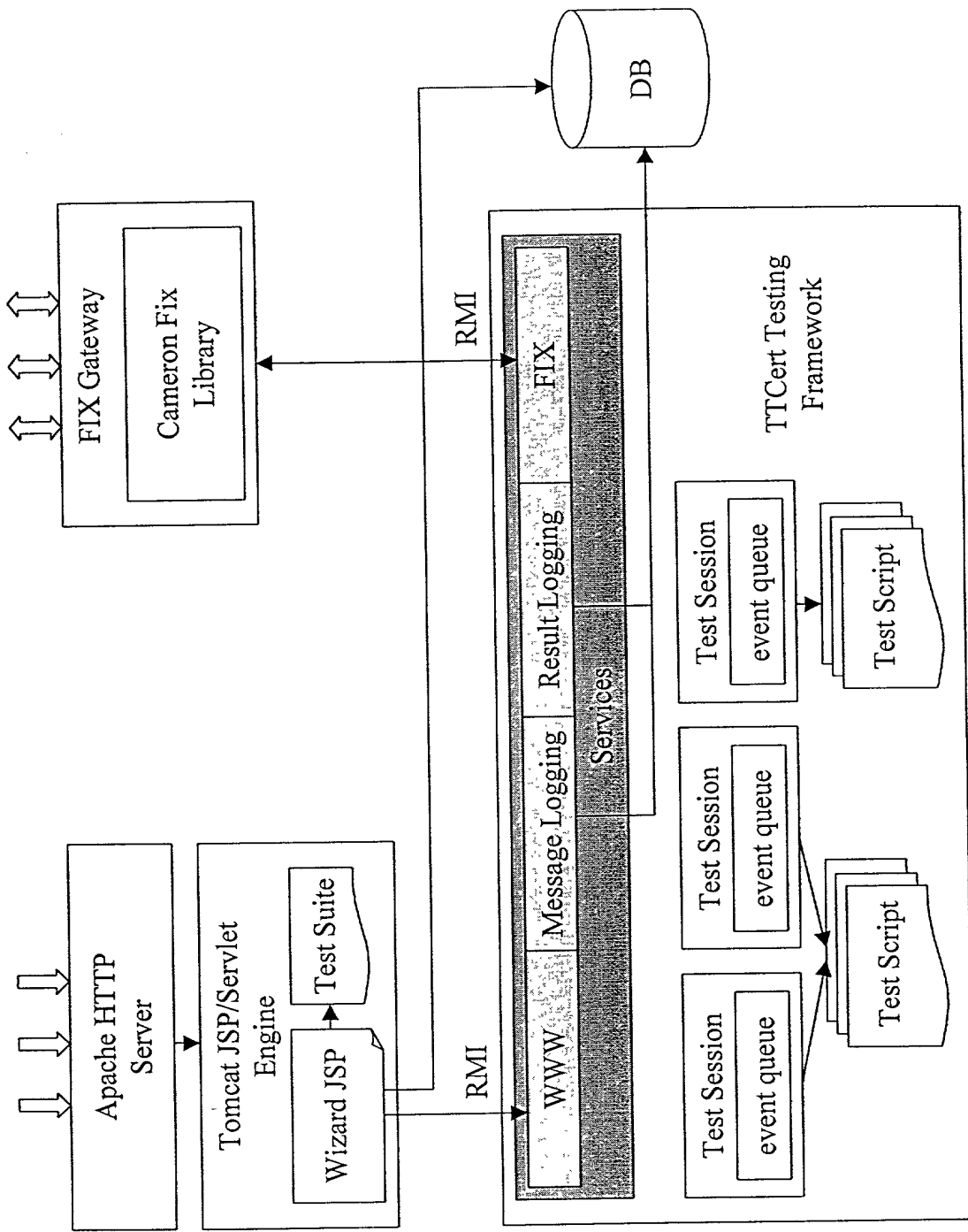


FIG. 3

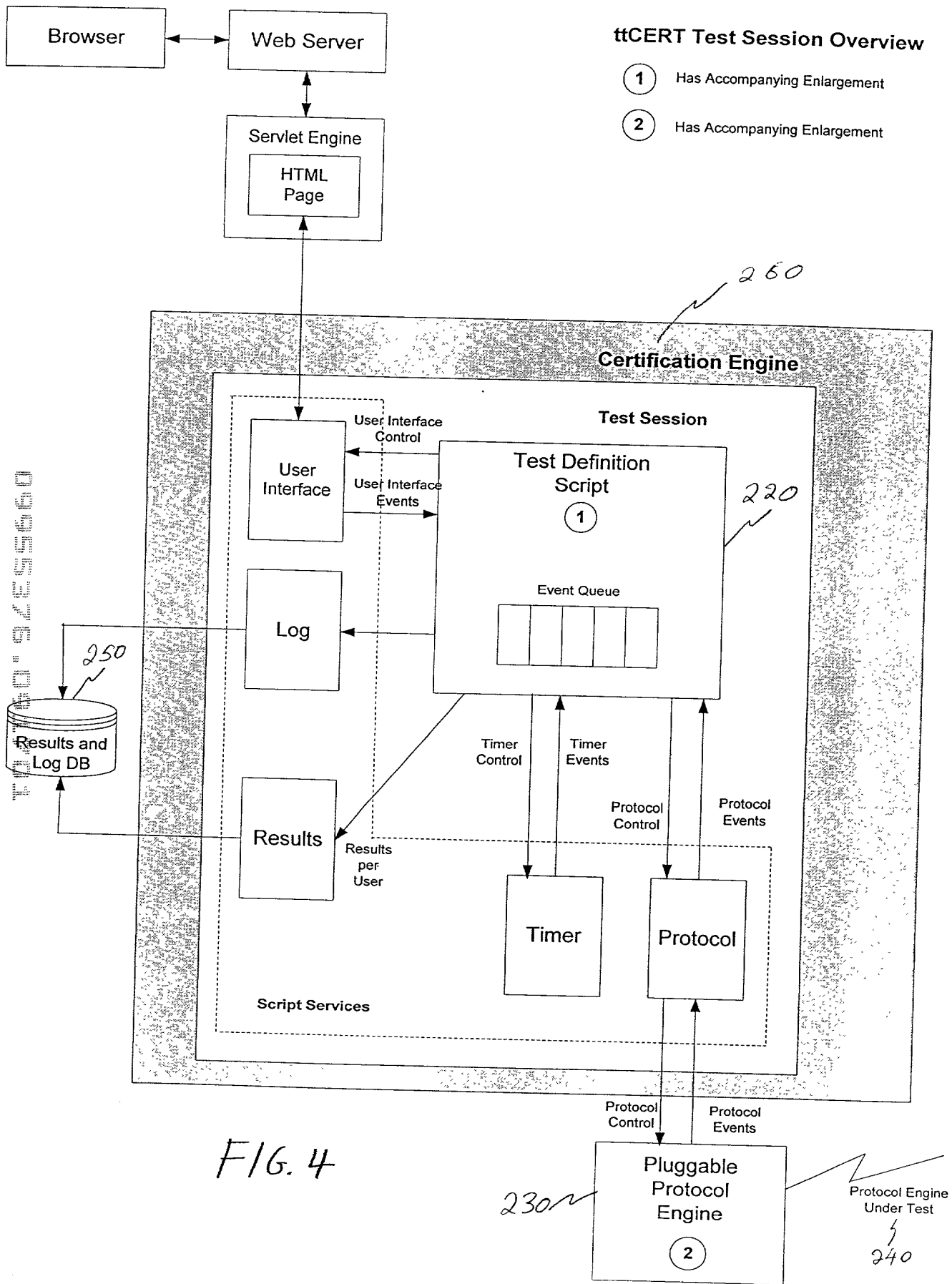


FIG. 4

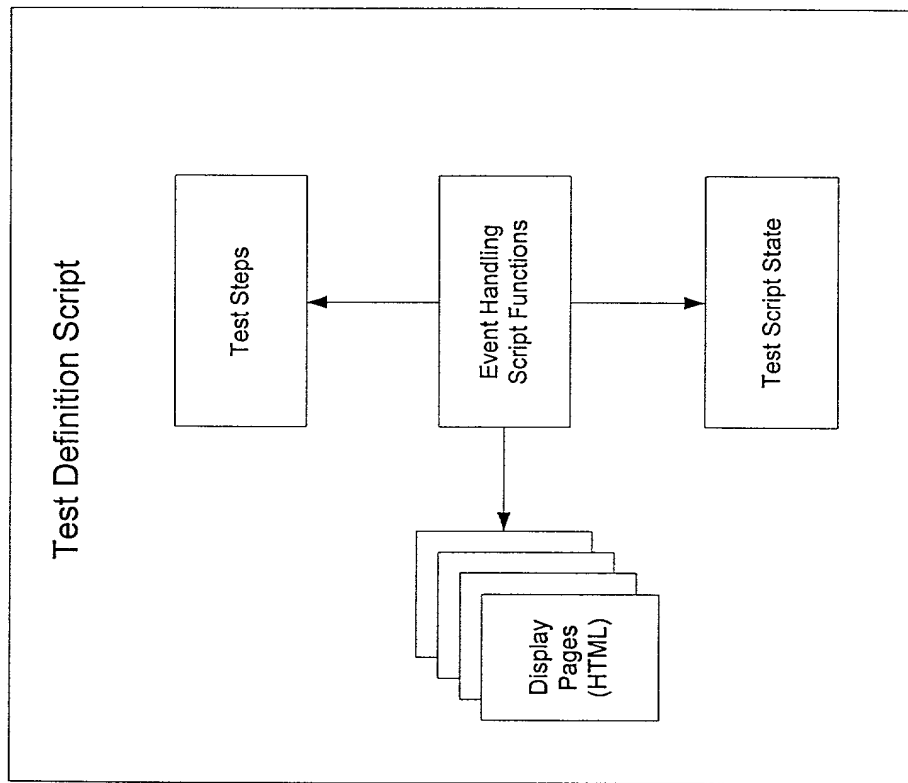


FIG. 5

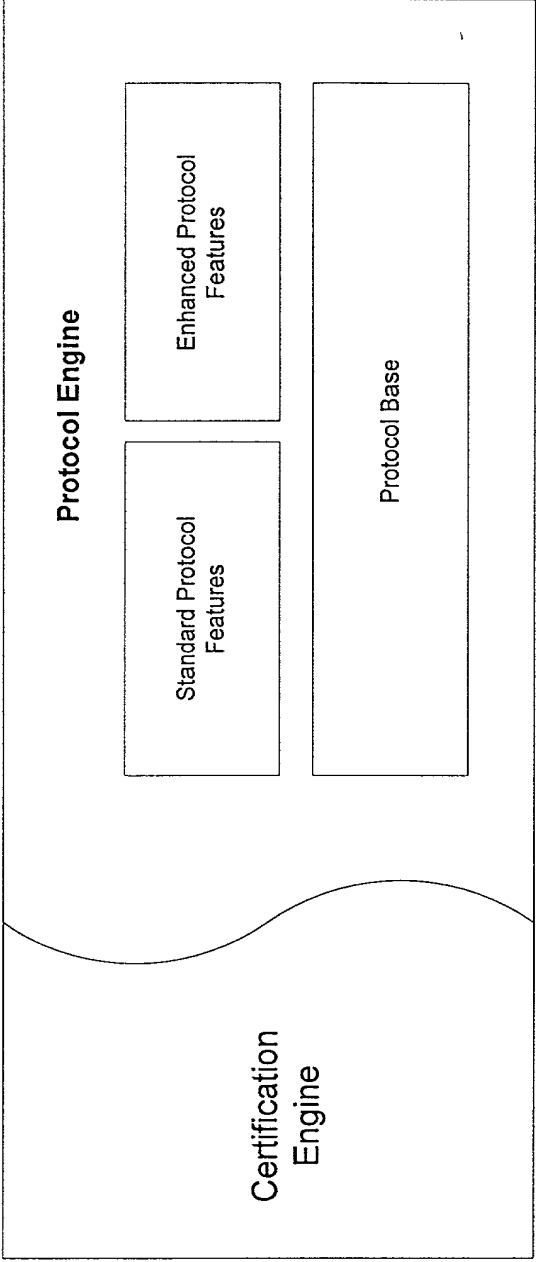


FIG. 6

Testing Workflow

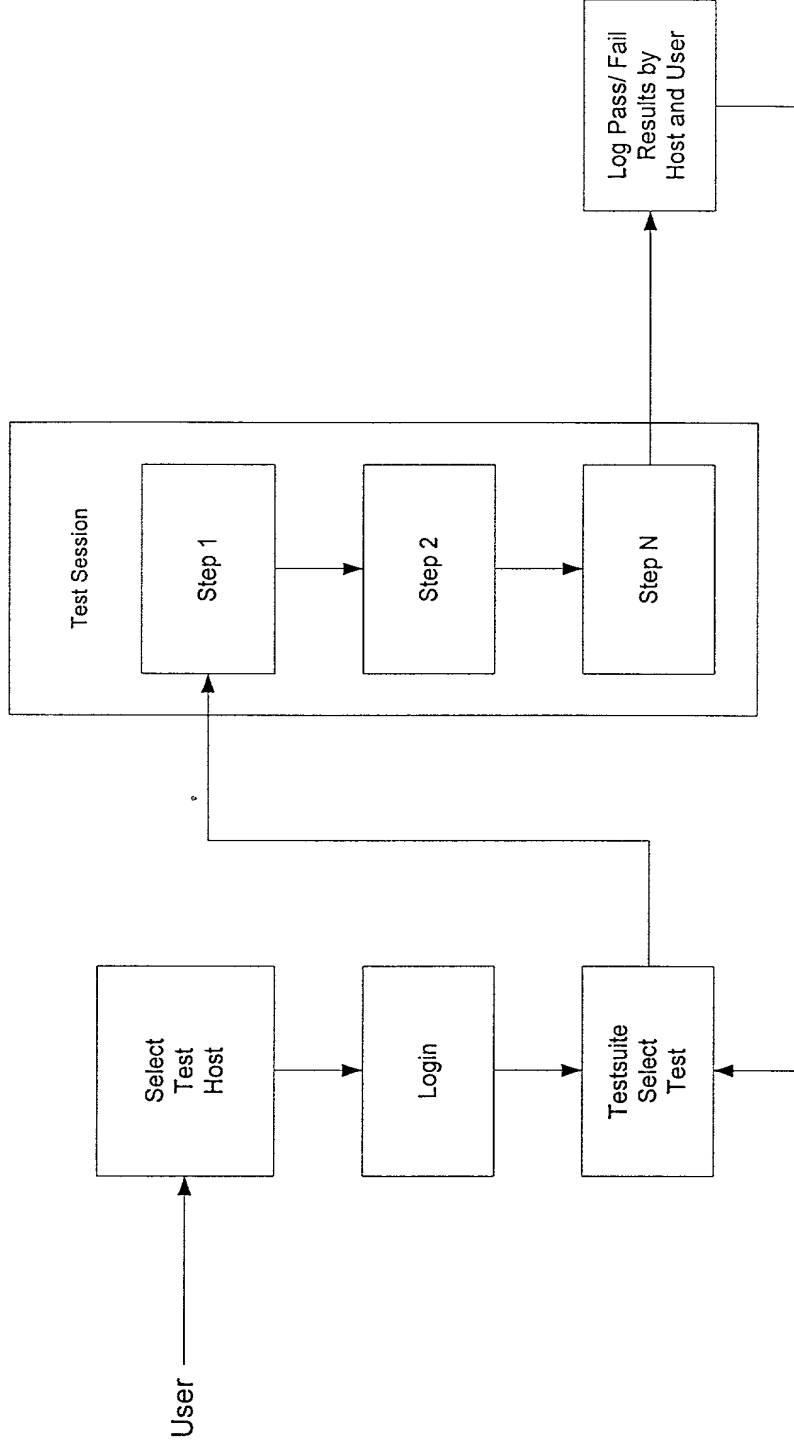


FIG. 7

8:50 8:50 8:50 8:50 8:50



POWERED BY TransactTools, Inc.
[Reset FIX](#) | [Admin](#) | [Profile](#) | [Discussion](#) | [Help](#) | [Logout](#)

Test Suite: **FIX Session-Level Test Cases**

Preferences

- * **Set Preferences**
Manage preferences for running the OpenFIX tests
[View Logs](#) | [\[Required\] passed](#)

FIX Session-Level Test Cases

- * **1. Initiate or Accept Logon**
[View Logs](#) | [\[Required\] passed](#)
- * **4. Send Heartbeat Message**
[View Logs](#) | [\[Required\] failed](#)
- * **5. Receive Heartbeat Message**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **6. Send Test Request**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **7. Receive Reject Message**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **8. Receive Resend Request Message**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **9. Synchronize Sequence Numbers**
[View Logs](#) | [Not Tested](#)
- * **11. Receive Sequence Reset (Reset)**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **12. Initiate Logout Process**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **13. Receive Logout Message**
[View Logs](#) | [\[Required\] Not Tested](#)
- * **18. Support Third-Party Addressing**
[View Logs](#) | [Not Tested](#)
- * **19. Test PossResend Handling**
[View Logs](#) | [Not Tested](#)

2 and 3. Receive Message Standard Header and Trailer

Welcome, TransactTools, Inc.

The list at left reflects your current certification testing status.

Click on any of the incomplete tests to begin.

For assistance, please consult the discussion boards, or contact us at support@transacttools.net

F/6.8

VtCERT demonstration FIX testing server	
Admin Tools	
Users	910
• Session Manager	920
Tests	930
• Results	940
• Results (Summary)	950
Scripts	
• Manage Scripts	
• User Properties	
Licenses	
• Issue/Limit Licenses	

F/G. 9

Active Certification Sessions (as of 14:21:40) [[Refresh](#)]

demo

TransactTools, Inc. () [Logout]	
Web Session	
Status:	Logged In
Login Time:	Thu May 17 14:20:35 EDT 2001
Last Activity Time:	Thu May 17 14:21:40 EDT 2001
Time Inactive:	0:0:0
Last Request:	/cert/demo/cert/admin/session.jsp
FIX Certification Test Session [Shutdown] [Reset FIX] [View Log]	
Status:	In Progress
Script:	D1 - (Connect to server)
Start Time:	urn:D1:1
FIX Connection Status:	[Thu May 17 14:21:35 EDT 2001]
IP Address:	Not Connected
Last Sent:	N/A
Last Received:	N/A

F/16.16

transactiontools

OpenBXT-Testing Service

POWERED BY ZEN

Test Suite | Admin | Help | Logout

Manage Scripts

Current directory: /

Upload Scripts

Download Scripts (ZIP File)

Remove Directory

1110 1120 1130

Subdirectories

Directory Name	# Files
core	4 files
dtd	2 files

1140

Make Directory

Files

File Name	Last Modified	Size
1.xml	07/24/2001 11:09	4021
10.xml	07/24/2001 11:09	5835
11.xml	07/24/2001 11:09	4871
12.xml	07/24/2001 11:09	4734
13.xml	07/24/2001 11:09	3944
14a.xml	07/24/2001 11:09	3754
14b.xml	07/24/2001 11:09	3709
14c.xml	07/24/2001 11:09	3861
14d.xml	07/24/2001 11:09	3711
14e.xml	07/24/2001 11:09	3846
14f.xml	07/24/2001 11:09	3784
14g.xml	07/24/2001 11:09	3708
14h.xml	07/24/2001 11:09	3750
14i.xml	07/24/2001 11:09	5152
14j.xml	07/24/2001 11:09	5729
14k.xml	07/24/2001 11:09	3752
14l.xml	07/24/2001 11:09	4503
14m.xml	07/24/2001 11:09	4554
18.xml	07/24/2001 02:07	3731
19.xml	07/24/2001 01:31	3795

FIG. 11

POWERED BY 



Test Suite | Manage Scripts | Help | Logout

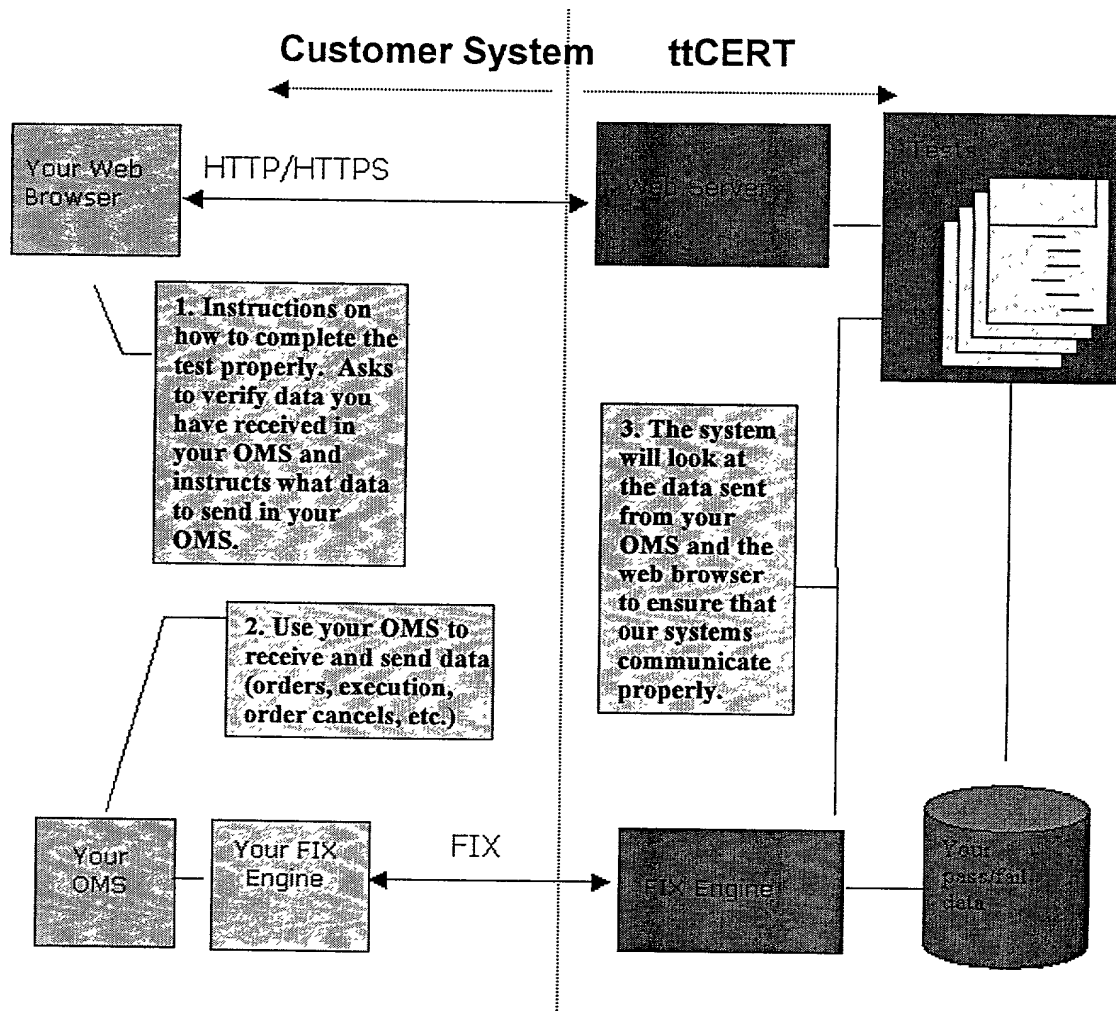
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>
Upload:	<input type="text"/>	<input type="button" value="Browse"/>

1210

Transfer File(s)	<input type="text" value="2-1220"/>
------------------	-------------------------------------

FIG. 12

095376-0101
T04T60"92E5660



F/G. 13

Order Fill

Steps

- Connect to Server
- Submit Order
- Verify Order Ack
- Verify Fill
- Test Complete

Send an Order

Please enter and send the following order from your trading application:

Sell 1500 AOL at a limit price of 40

Waiting for order...

2-1410

Help

Enter and send an order from your trading application to the test server.

The test server will verify that the order is sent successfully and contains correct information.

FIG. 14

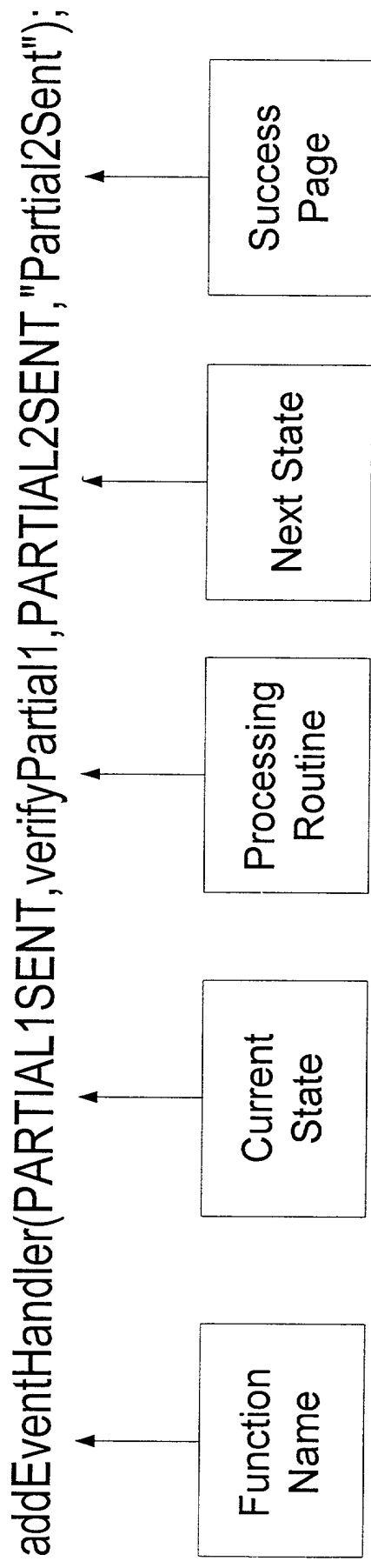


FIG. 15

Order Fill

Steps

- Connect to Server
- Submit Order
- Verify Order-Ack
- Verify Fill
- Test Complete

Verify Order Ack

The test server has sent you an acknowledgement for your order. You should see that your order has been accepted by the test server and is now in a "working" or "live" state.

Do you see that the order has been accepted?

☒ YES ☐ NO

Warnings: (see Help at right for more details)

Field 52(SendingTime): Your time (Thu Aug 02 13:42:31 EDT 2001) is more than 1 minute away from the host time (Thu Aug 02 13:41:16 GMT-0400 (EDT 2001))

Help

The order you sent was received and validated by the test server, and a confirmation was sent by the test server back to your trading application.

Your trading application should indicate to you that an ack ("accept" ... as opposed to "reject") was received for the order you sent and that the order is now "live".

NOTE: Some trading applications simply move the new order into a "working orders" window or denote that the order has moved from a "pending" to a "live" state. It is not important how the ack is represented, only that you know the order is actively being traded at the broker.

Warnings:

- The sending time on this message is more than 1 minute off. We accept deviations of up to 1 minute to account for clock differences, but we encourage you to sync your server's clock to a atomic time to minimize this difference.

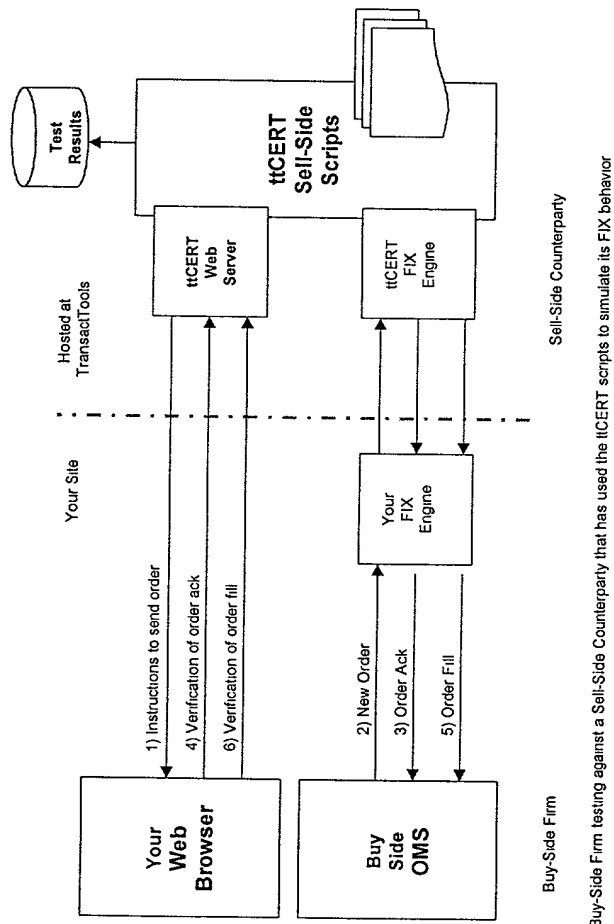
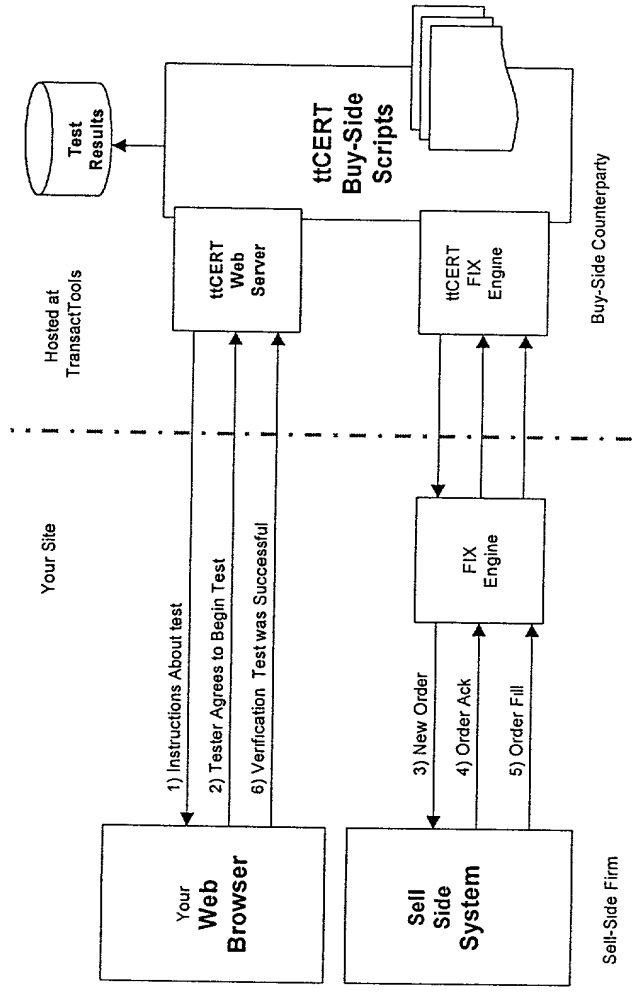


FIG. 17



Sell-Side Firm testing against a Buy-Side Counterparty that has used the ttCERT scripts to simulate its FIX behavior

FIG. 18

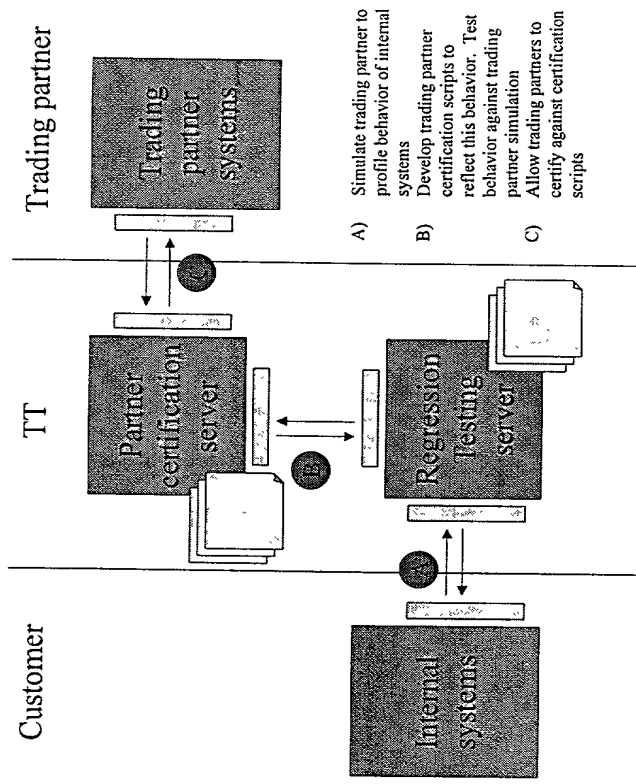


FIG. 19

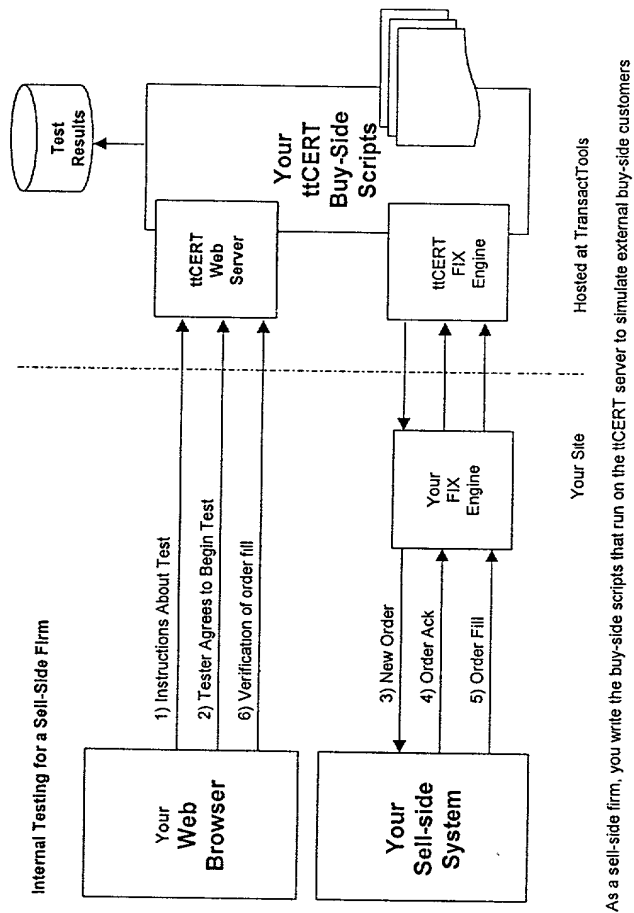


FIG. 20

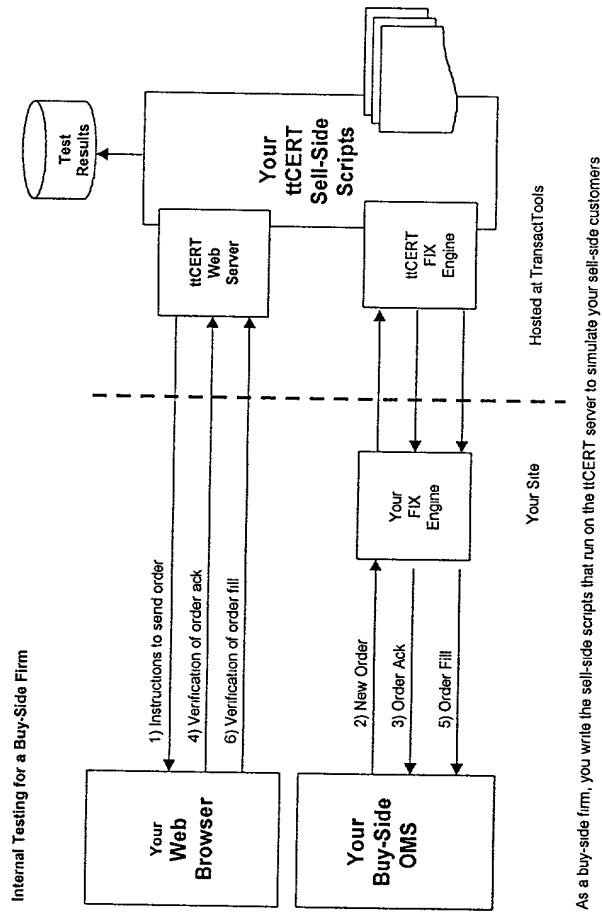


FIG. 21

Internal Testing of Automated Scripts - Running Buy-Side Scripts Against Sell-Side Scripts

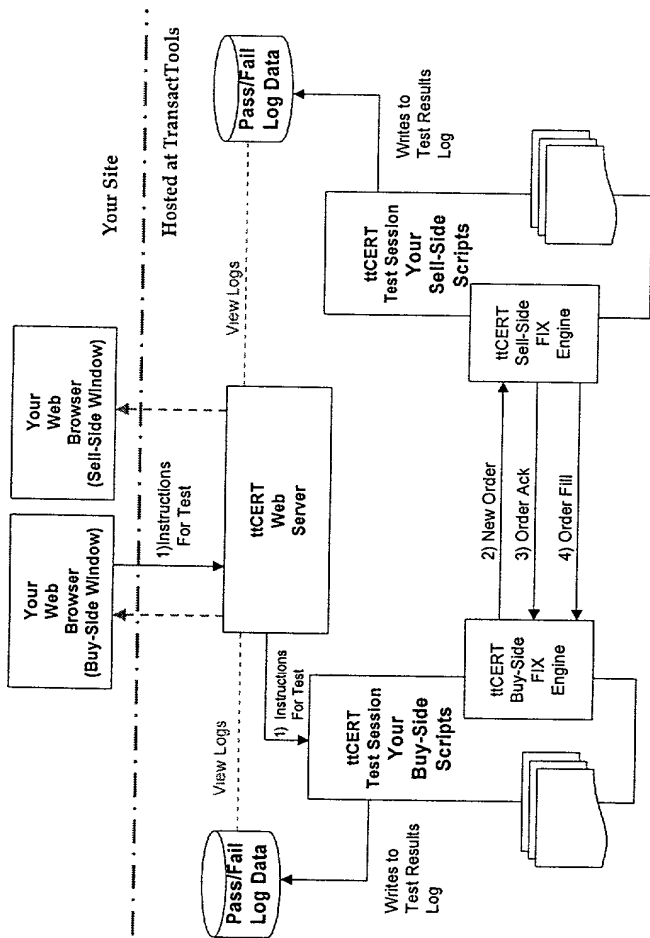


FIG. 22

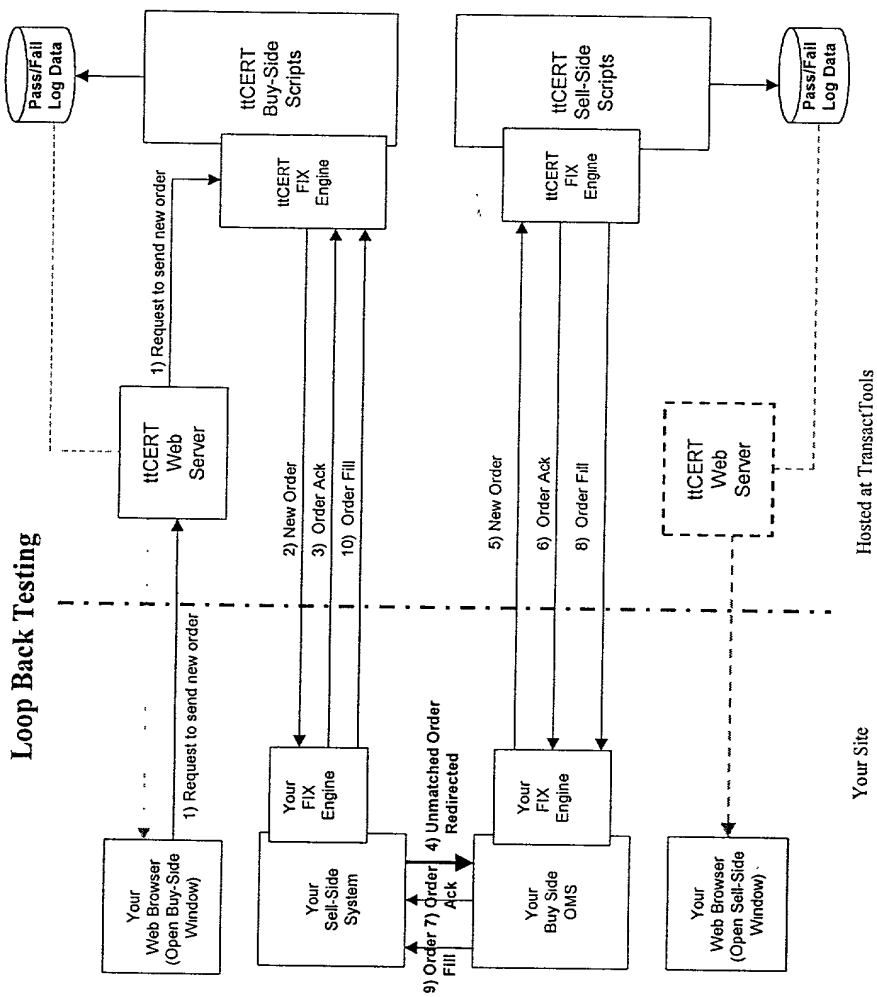


FIG. 23